

On page 272 - illustration

Cross section of Browns Mountain Anticline along the highway (State Route 43) following the Knapp Creek gorge between the Hunterville bridge, 0.8 miles southeast of Huntsville, and the Minnehaha Springs bridge, 0.5 miles northwest of Minnehaha Springs.

(Sketch attached)

The major anticlines are described as follows:

Deer Park Anticline

Blackwater Anticline

Browns Mountain Anticline

Horton Anticline

Deer Park Anticline enters Pocahontas from Randolph 0.4 miles west of Mace - continues in a general S. W. direction for 11-1/4 miles.

Passing just west of Linwood - terminating on the eastern end of Red Lick Mountain.

The Blackwater Anticline has its origin in Mineral County - southwest to Maryland - roughly paralleling the west Virginia and Maryland Line to 1 mile southeast of Gormana - continues southward to Grant - Tucker County line across Tucker through Caneen Valley into Randolph entirely across Randolph to Pocahontas entering 2 miles Northeast of Wildell - continues southwest for 13 miles passing through Frank, and apparently dying out in Sandy Ridge.

Under the head of Browns Mountain Anticline will be discussed the complex folded area or Anticlinorium, that is so consp-

icous along Knap Creek between Huntermville and Minnehaha Springs and that extends south westward along Brushy and Beaver Lick Mountains into Greenbrier County and to the north along Browns and Mitchael Mountains, through Green Bank, and ending approximately one mile northeast of Bartow.

The Mountains which is the most conspicuous structural feature in Pocahontas County, has its source in a number of small folds between the southern ends of Blackwater Anticline and Job syncline near Bartow.

It continues southwestward roughly paralleling the State road to Green Bank where much evidence of squeezing can be seen, and from this locality the main axis connects with the top of Mitchael Mountain.

Along the state road east of Dunmore a series of folds is encountered with squeezing and mashing.

The Oriskany series 1/4 mile east of Dunmore is overturned with a 55° dip to the south east, while 3/4 of a mile farther east the Bossarville platy limestone has been squeezed almost to a point of flowage, one-half mile farther east from the latter point a low graceful, single arch of the White Medina constitutes the main axis of this folded area and marks the northern end of this series that is so prominently developed between Huntermville and Minnehaha Spring.

At the southern end of Michael Mountain the axis trends somewhat abruptly to the southwest and crosses the Brown Creek - Frost road 1.3 miles east Thorny Creek School. From this point southward the major fold holds to



the western side of Browns Mountain, but in the gorge of Knapp creek its true nature as an anticlinorium becomes more apparent, there being another fold of equal magnitude just west of the Minnehaha Springs bridge.

The rocks exposed in this fold include those of the Chemung Series of the Upper Devonian down to the Red Medina Series of the basal Silurian.

Both the eastern and western flanks are composed of steep dips and occasionally over-turned somewhat beyond the vertical.

At Michael Mountain this anticline its greatest altitude bringing the White Medina quartzite to the surface along the crest of the ridge.

The same series is exposed in the arch 1.7 miles east of Dunmore and is also well exposed, with the underlying Red Medina, in the gorge of Knapp Creek between Hunterville and Minnehaha Springs. It is also the Principal ridge rock in Beaver Lick Mountain.

Much of the area of this Anticline is composed of the Silurian limestones, but there are a number of the ridges composed of the Clinton quartzites.

The remaining ridge maker is the Oriskany Series that flanks this entire Anticline on either side of the ridge which slopes down to the Lower Devonian shale depressions that surround the mountains.

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Cave near base of Greenbrier River limestone at the head of Stevend Hole Run. The cave was the home of Steven Sewell for several years and is now a point of interest for tourists.

Old Brown's Mt. Anticline

1 m. se of Huntersville

Town 18



Insert

Road

Bridge  $\frac{3}{4}$  mile  
SE Huntersville

Brown's Mountain Anticline

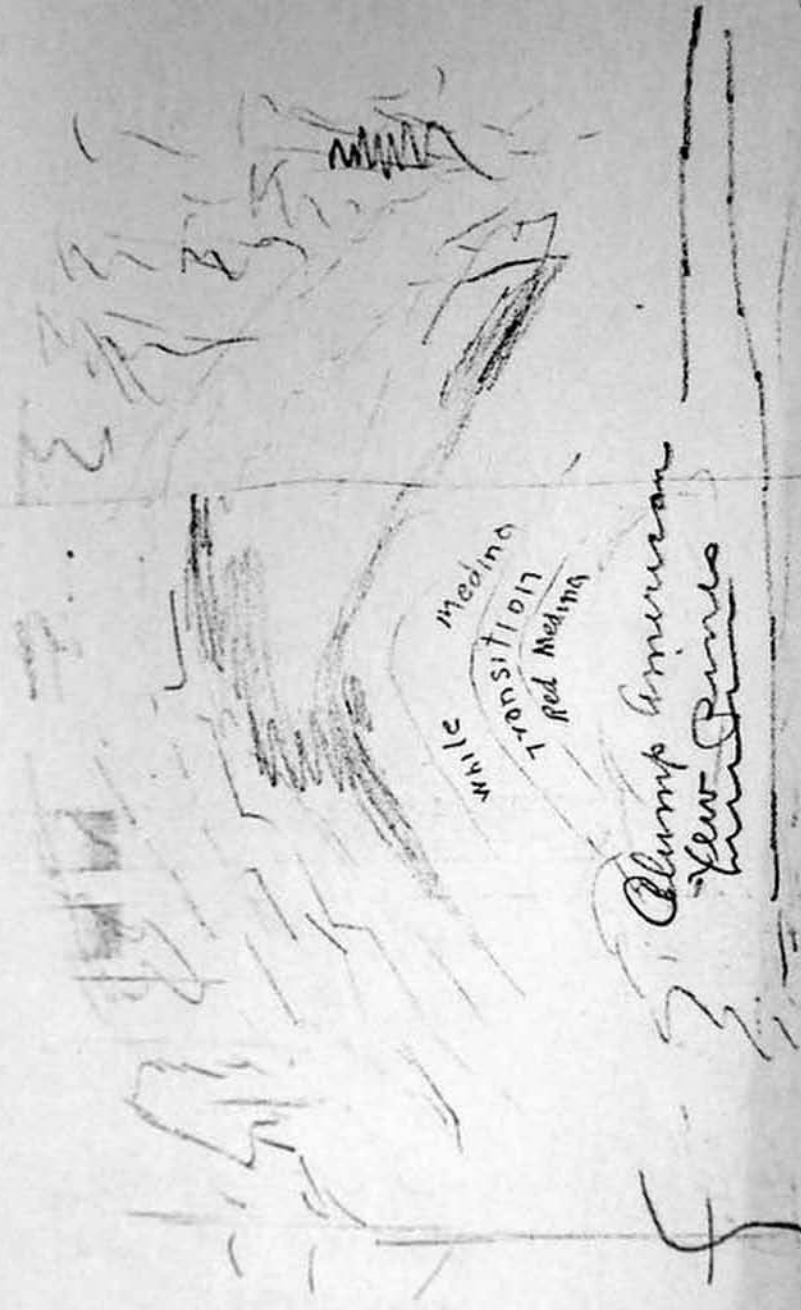
Possum Hollow

Buzzards Hollow

Barkley River

Bridge Minnehaha Springs





White  
translucent  
Red Meding

Plump American  
New Pines

Beautiful arch in Meadows - 1 mi south east  
of Huntersville, beneath this arch are a few  
of the remaining American New pines in the country